

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended): An image formation system formed with at least two units of digital copying machines connected to each other and in which a plurality of the connected digital copying machines can share and execute one job, wherein

each of the digital copying machines has a link copy function that a document is set in one of digital copying machines and at least two units of the digital copying machines share the job of executing copy operation on said document, and a printer function of printing according to a print request from the outside, and

when receiving the print request from said outside during the copy operation based on the link copy function from its start to finish, the digital copying machine puts the print request on hold,

wherein each of the digital copying machines comprises a memory unit connected to a system controller via a system bus and configured to store a data of the document locally in the digital copying machine, said unit comprising:

a compression unit, configured to compress said data;

a storage unit, configured to store said compressed data received from said compression unit via a local bus in said memory unit and not via said system bus.

Claim 2 (Original): The image formation system according to claim 1, wherein each of said digital copying machines outputs images printed by printer operation and images printed by copy operation based on the link copy function to different paper output sections.

Claim 3 (Original): The image formation system according to claim 1, wherein at least two units of said digital copying machines are directly connected to each other.

Claim 4 (Original): The image formation system according to claim 1, wherein at least two units of said digital copying machines are connected to each other through a network.

Claim 5 (Original): The image formation system according to claim 1, wherein each of said digital copying machines permits the printer operation for the print request from the outside during the interruption when the copy operation based on the link copy function is interrupted after the operation is started and before being finished.

Claim 6 (Original): The image formation system according to claim 5, wherein each of said digital copying machines can set permission or non-permission to execute the printer operation for the print request from the outside during the interruption when the copy operation based on the link copy function is interrupted after the operation is started and before being finished.

Claim 7 (Original): The image formation system according to claim 1, wherein each of said digital copying machines does not permit the printer operation for the print request from the outside during the interruption when the copy operation based on the link copy function is interrupted after the operation is started and before being finished.

Claim 8 (Original): The image formation system according to claim 7, wherein each of said digital copying machines can set permission or non-permission to execute the printer

operation for the print request from the outside during the interruption when the copy operation based on the link copy function is interrupted after the operation is started and before being finished.

Claim 9 (Original): The image formation system according to claim 1, wherein said digital copying machine executes the printer operation according to the print request, that has been put on hold, after the copy operation based on the link copy function is finished.

Claim 10 (Currently Amended): A digital copying machine connected to at least another one of digital copying machines with which data communications can be performed, said digital copying machine having:

a link copy function that a document is set in the machine itself or another digital copying machine and at least two units of the digital copying machines share the job of executing copy operation on said document, and a printer function of printing according to a print request from the outside, wherein,

when receiving the print request from said outside during the copy operation based on the link copy function from its start to finish, the digital copying machine puts the print request on hold,

wherein each of the digital copying machines comprises a memory unit connected to a system controller via a system bus and configured to store a data of the document locally in the digital copying machine, said unit comprising:

a compression unit, configured to compress said data;

a storage unit, configured to store said compressed data received from said compression unit via a local bus in said memory unit and not via said system bus.

Claim 11 (Original): The digital copying machine according to claim 10, said digital copying machine outputting images printed by printer operation and images printed by copy operation based on the link copy function to different paper output sections.

Claim 12 (Original): The digital copying machine according to claim 10, said digital copying machine directly connected to at least another one of said digital copying machines.

Claim 13 (Original): The digital copying machine according to claim 10, said digital copying machine connected to at least another one of said digital copying machines through a network.

Claim 14 (Original): The digital copying machine according to claim 10, which permits printer operation for a print request from the outside during the interruption when the copy operation based on the link copy function is interrupted after the operation is started and before being finished.

Claim 15 (Original): The digital copying machine according to claim 14, which can set permission or non-permission to execute printer operation for a print request from the outside during the interruption when the copy operation based on the link copy function is interrupted after the operation is started and before being finished.

Claim 16 (Original): The digital copying machine according to claim 10, which does not permit printer operation for a print request from the outside during the interruption when the copy operation based on the link copy function is interrupted after the operation is started and before being finished.

Claim 17 (Original): The digital copying machine according to claim 16, which can set permission or non-permission to execute printer operation for a print request from the outside during the interruption when the copy operation based on the link copy function is interrupted after the operation is started and before being finished.

Claim 18 (Original): The digital copying machine according to claim 10, wherein said digital copying machine executes the printer operation according to the print request, that has been put on hold, after the copy operation based on the link copy function is finished.

Claim 19 (Currently Amended): An image formation system formed with at least two units of digital copying machines connected to each other and in which a plurality of the connected digital copying machines can share and execute one job, wherein

each of the digital copying machines has a link copy function that a document is set in one of digital copying machines and at least two units of the digital copying machines share the job of executing copy operation on said document, and a printer function of printing according to a print request from the outside, and

when the start of copy operation based on the link copy function is instructed during the printer operation according to the print request from the outside, the digital copying machine interrupts the printer operation to start the copy operation based on the link copy function,

wherein each of the digital copying machines comprises a memory unit connected to a system controller via a system bus and configured to store a data of the document locally in the digital copying machine, said unit comprising:

a compression unit, configured to compress said data;

a storage unit, configured to store said compressed data received from said compression unit via a local bus in said memory unit and not via said system bus.

Claim 20 (Original): The image formation system according to claim 19, wherein each of said digital copying machines outputs images printed by printer operation and images printed by copy operation based on the link copy function to different paper output sections.

Claim 21 (Original): The image formation system according to claim 19, wherein at least two units of said digital copying machines are directly connected to each other.

Claim 22 (Original): The image formation system according to claim 19, wherein at least two units of said digital copying machines are connected to each other through a network.

Claim 23 (Currently Amended): An image formation system formed with at least two units of digital copying machines connected to each other and in which a plurality of the connected digital copying machines can share and execute one job, wherein

each of the digital copying machines has a link copy function that a document is set in one of digital copying machines and at least two units of the digital copying machines share the job of executing copy operation on said document, and a printer function of printing according to a print request from the outside, and

when the start of copy operation based on the link copy function is instructed during the printer operation according to the print request from the outside, the digital copying machine waits until the printer operation is finished and starts the copy operation based on the link copy function after the printer operation is finished,

wherein each of the digital copying machines comprises a memory unit connected to a system controller via a system bus and configured to store a data of the document locally in the digital copying machine, said unit comprising:

a compression unit, configured to compress said data;

a storage unit, configured to store said compressed data received from said compression unit via a local bus in said memory unit and not via said system bus.

Claim 24 (Original): The image formation system according to claim 23, wherein each of said digital copying machines outputs images printed by printer operation and images printed by copy operation based on the link copy function to different paper output sections.

Claim 25 (Original): The image formation system according to claim 23, wherein at least two units of said digital copying machines are directly connected to each other.

Claim 26 (Original): The image formation system according to claim 23, wherein at least two units of said digital copying machines are connected to each other through a network.

Claim 27 (Currently Amended): An image formation system formed with at least two units of digital copying machines connected to each other and in which a plurality of the connected digital copying machines can share and execute one job, wherein

each of the digital copying machines has a link copy function that a document is set in one of digital copying machines and at least two units of the digital copying machines share the job of executing copy operation on said document, and a printer function of printing according to a print request from the outside, and

when the start of copy operation based on the link copy function is instructed during the printer operation according to the print request from the outside, the digital copying machine displays a message to the effect that the printer is operating and also a menu screen used to instruct a following operation to be executed, and

when Interrupt is selected in the menu screen, the digital copying machine interrupts the printer operation to start the copy operation based on the link copy function; when Wait is selected, the digital copying machine waits until the printer operation is finished and starts the copy operation based on the link copy function after the printer operation is finished; and when Cancel is selected, the digital copying machine cancels the copy operation based on the link copy function,

wherein each of the digital copying machines comprises a memory unit connected to a system controller via a system bus and configured to store a data of the document locally in the digital copying machine, said unit comprising:

a compression unit, configured to compress said data;

a storage unit, configured to store said compressed data received from said compression unit via a local bus in said memory unit and not via said system bus.

Claim 28 (Original): The image formation system according to claim 27, wherein each of said digital copying machines outputs images printed by printer operation and images printed by copy operation based on the link copy function to different paper output sections.

Claim 29 (Original): The image formation system according to claim 27, wherein at least two units of said digital copying machines are directly connected to each other.

Claim 30 (Original): The image formation system according to claim 27, wherein at least two units of said digital copying machines are connected to each other through a network.

Claim 31 (Original): The image formation system according to claim 27, wherein the digital copying machine dismisses the menu screen to start the copy operation based on the link copy function when the printer operation according to the print request from the outside has ended during displaying of the menu screen.

Claim 32 (Currently Amended): A digital copying machine connected to at least another one of digital copying machines with which data communications can be performed, said digital copying machine having:

a link copy function that a document is set in the machine itself or another digital copying machine and at least two units of the digital copying machines share the job of executing copy operation on said document, and a printer function of printing according to a print request from the outside, wherein,

when the start of copy operation based on the link copy function is instructed during the printer operation according to the print request from the outside, the digital copying machine interrupts the printer operation to start the copy operation based on the link copy function,

wherein each of the digital copying machines comprises a memory unit connected to a system controller via a system bus and configured to store a data of the document locally in the digital copying machine, said unit comprising:

a compression unit, configured to compress said data;

a storage unit, configured to store said compressed data received from said compression unit via a local bus in said memory unit and not via said system bus.

Claim 33 (Original): The digital copying machine according to claim 32, said digital copying machine outputting images printed by printer operation and images printed by copy operation based on the link copy function to different paper output sections.

Claim 34 (Original): The digital copying machine according to claim 32, said digital copying machine directly connected to at least another one of said digital copying machines.

Claim 35 (Original): The digital copying machine according to claim 32, said digital copying machine connected to at least another one of said digital copying machines through a network.

Claim 36 (Currently Amended): A digital copying machine connected to at least another one of digital copying machines with which data communications can be performed, said digital copying machine having:

a link copy function that a document is set in the machine itself or another digital copying machine and at least two units of the digital copying machines share the job of executing copy operation on said document, and a printer function of printing according to a print request from the outside, wherein,

when the start of copy operation based on the link copy function is instructed during the printer operation according to the print request from the outside, the digital copying machine waits until the printer operation is finished and starts the copy operation based on the link copy function after the printer operation is finished,

wherein each of the digital copying machines comprises a memory unit connected to a system controller via a system bus and configured to store a data of the document locally in the digital copying machine, said unit comprising:

a compression unit, configured to compress said data;

a storage unit, configured to store said compressed data received from said compression unit via a local bus in said memory unit and not via said system bus.

Claim 37 (Original): The digital copying machine according to claim 36, said digital copying machine outputting images printed by printer operation and images printed by copy operation based on the link copy function to different paper output sections.

Claim 38 (Original): The digital copying machine according to claim 36, said digital copying machine directly connected to at least another one of said digital copying machines.

Claim 39 (Original): The digital copying machine according to claim 36, said digital copying machine connected to at least another one of said digital copying machines through a network.

Claim 40 (Currently Amended): A digital copying machine connected to at least another one of digital copying machines with which data communications can be performed, said digital copying machine having:

a link copy function that a document is set in the machine itself or another digital copying machine and at least two units of the digital copying machines share the job of executing copy operation on said document, and a printer function of printing according to a print request from the outside, wherein,

when the start of copy operation based on the link copy function is instructed during the printer operation according to the print request from the outside, the digital copying machine displays a message to the effect that the printer is operating and also a menu screen used to instruct a following operation to be executed, and

when Interrupt is selected in the menu screen, the digital copying machine interrupts the printer operation to start the copy operation based on the link copy function; when Wait is selected, the digital copying machine waits until the printer operation is finished and starts the copy operation based on the link copy function after the printer operation is finished; and when Cancel is selected, the digital copying machine cancels the copy operation based on the link copy function,

wherein each of the digital copying machines comprises a memory unit connected to a system controller via a system bus and configured to store a data of the document locally in the digital copying machine, said unit comprising:

a compression unit, configured to compress said data;

a storage unit, configured to store said compressed data received from said compression unit via a local bus in said memory unit and not via said system bus.

Claim 41 (Original): The digital copying machine according to claim 40, said digital copying machine outputting images printed by printer operation and images printed by copy operation based on the link copy function to different paper output sections.

Claim 42 (Original): The digital copying machine according to claim 40, said digital copying machine directly connected to at least another one of said digital copying machines.

Claim 43 (Original): The digital copying machine according to claim 40, said digital copying machine connected to at least another one of said digital copying machines through a network.

Claim 44 (Original): The digital copying machine according to claim 40 which dismisses the menu screen to start the copy operation based on the link copy function when the printer operation according to the print request from the outside has ended during displaying of the menu screen.

Claim 45 (Currently Amended): An image formation system formed with at least two units of digital copying machines connected to each other, each of which has a link copy function that a digital copying machine determined as a master machine scans an image of a document as an object to be copied and transfers the image of the scanned document to at least another one of the digital copying machines as a slave machine, and that said master machine and said slave machine share the job of printing the scanned document image, wherein

said master machine has a printer function of printing according to a print request from the outside, and

when the start of copy operation based on the link copy function is instructed during the printer operation according to the print request from the outside, said master machine interrupts the printer operation and preferentially executes the copy operation, on the other hand,

said slave machine has:

a printer function of printing according to a print request from the outside, and

even when the start of copy operation based on the link copy function is instructed during the printer operation according to the print request from the outside, said slave machine continues to execute the printer operation,

wherein each of the digital copying machines comprises a memory unit connected to a system controller via a system bus and configured to store a data of the image locally in the digital copying machine, said unit comprising:

a compression unit, configured to compress said data;

a storage unit, configured to store said compressed data received from said compression unit via a local bus in said memory unit and not via said system bus.

Claim 46 (Original): The image formation system according to claim 45, wherein each of said digital copying machines outputs images printed by printer operation and images printed by copy operation based on the link copy function to different paper output sections.

Claim 47 (Original): The image formation system according to claim 45, wherein at least two units of said digital copying machines are directly connected to each other.

Claim 48 (Original): The image formation system according to claim 45, wherein at least two units of said digital copying machines are connected to each other through a network.

Claim 49 (Currently Amended): A digital copying machine as a slave machine connected to a digital copying machine as a master machine and which has a link copy function that the slave machine receives an image of a document scanned and transferred by

said master machine and shares the job of printing the scanned document image with said master machine, said slave machine having:

a printer function of printing according to a print request from the outside, wherein, even when the start of copy operation based on the link copy function is instructed during the printer operation according to the print request from the outside, said slave machine continues to execute the printer operation,

wherein each of the digital copying machines comprises a memory unit connected to a system controller via a system bus and configured to store a data of the image locally in the digital copying machine, said unit comprising:

a compression unit, configured to compress said data;

a storage unit, configured to store said compressed data received from said compression unit via a local bus in said memory unit and not via said system bus.

Claim 50 (Original): The digital copying machine as a slave machine according to claim 49, said slave machine outputting images printed by printer operation and images printed by copy operation based on the link copy function to different paper output sections.

Claim 51 (Original): The digital copying machine as a slave machine according to claim 49, said slave machine directly connected to said master machine.

Claim 52 (Original): The digital copying machine as a slave machine according to claim 49, said slave machine connected to said master machine through a network.

Claim 53 (Currently Amended): An image formation system formed with at least two units of digital copying machines connected to each other, each of which has a link copy

function that a digital copying machine determined as a master machine scans an image of a document as an object to be copied and transfers the image of the scanned document to at least another one of the digital copying machines as a slave machine, and that said master machine and said slave machine share the job of printing the scanned document image, wherein

said master machine has a printer function of printing according to a print request from the outside, and when receiving the print request from said outside during the copy operation based on the link copy function from its start to finish, the master machine puts the print request on hold, on the other hand,

said slave machine has a printer function of printing according to a print request from the outside, and when receiving the print request from said outside during the copy operation based on the link copy function from its start to finish, the slave machine preferentially executes the printer operation according to the print request,

wherein each of the digital copying machines comprises a memory unit connected to a system controller via a system bus and configured to store a data of the image locally in the digital copying machine, said unit comprising:

a compression unit, configured to compress said data;

a storage unit, configured to store said compressed data received from said compression unit via a local bus in said memory unit and not via said system bus.

Claim 54 (Original): The image formation system according to claim 53, wherein each of said digital copying machines outputs images printed by printer operation and images printed by copy operation based on the link copy function to different paper output sections.

Claim 55 (Original): The image formation system according to claim 53, wherein at least two units of said digital copying machines are directly connected to each other.

Claim 56 (Original): The image formation system according to claim 53, wherein at least two units of said digital copying machines are connected to each other through a network.

Claim 57 (Currently Amended): A digital copying machine as a slave machine connected to a digital copying machine as a master machine and which has a link copy function that the slave machine receives an image of a document scanned and transferred by said master machine and shares the job of printing the scanned document image with said master machine, said slave machine having:

a printer function of printing according to a print request from the outside, wherein, when receiving the print request from said outside during the copy operation based on the link copy function from its start to finish, the slave machine preferentially executes the printer operation according to the print request,

wherein each of the digital copying machines comprises a memory unit connected to a system controller via a system bus and configured to store a data of the image locally in the digital copying machine, said unit comprising:

a compression unit, configured to compress said data;

a storage unit, configured to store said compressed data received from said compression unit via a local bus in said memory unit and not via said system bus.

Claim 58 (Original): The digital copying machine as a slave machine according to claim 57, said slave machine outputting images printed by printer operation and images printed by copy operation based on the link copy function to different paper output sections.

Claim 59 (Original): The digital copying machine as a slave machine according to claim 57, said slave machine directly connected to said master machine.

Claim 60 (Original): The digital copying machine as a slave machine according to claim 57, said slave machine connected to said master machine through a network.

Claim 61 (Currently Amended): An image formation system formed with at least two units of digital copying machines connected to each other, each of which has a link copy function that a digital copying machine determined as a master machine scans an image of a document as an object to be copied and transfers the image of the scanned document to at least another one of the digital copying machines as a slave machine, and that said master machine and said slave machine share the job of printing the scanned document image, wherein

said master machine has a printer function of printing according to a print request from the outside, and when receiving the print request from said outside during the copy operation based on the link copy function from its start to finish, the master machine puts the print request on hold, on the other hand,

said slave machine has a printer function of printing according to a print request from the outside, and when receiving the print request from said outside during the copy operation based on the link copy function from its start to finish, the slave machine stops the copy operation and executes the printer operation according to the print request,

wherein each of the digital copying machines comprises a memory unit connected to a system controller via a system bus and configured to store a data of the image locally in the digital copying machine, said unit comprising:

a compression unit, configured to compress said data;

a storage unit, configured to store said compressed data received from said compression unit via a local bus in said memory unit and not via said system bus.

Claim 62 (Original): The image formation system according to claim 61, wherein each of said digital copying machines outputs images printed by printer operation and images printed by copy operation based on the link copy function to different paper output sections.

Claim 63 (Original): The image formation system according to claim 61, wherein at least two units of said digital copying machines are directly connected to each other.

Claim 64 (Original): The image formation system according to claim 61, wherein at least two units of said digital copying machines are connected to each other through a network.

Claim 65 (Currently Amended): A digital copying machine as a slave machine connected to a digital copying machine as a master machine and which has a link copy function that the slave machine receives an image of a document scanned and transferred by said master machine and shares the job of printing the scanned document image with said master machine, said slave machine having:

a printer function of printing according to a print request from the outside, wherein,

when receiving the print request from said outside during the copy operation based on the link copy function from its start to finish, the slave machine stops the copy operation and executes the printer operation according to the print request,

wherein each of the digital copying machines comprises a memory unit connected to a system controller via a system bus and configured to store a data of the image locally in the digital copying machine, said unit comprising:

a compression unit, configured to compress said data;

a storage unit, configured to store said compressed data received from said compression unit via a local bus in said memory unit and not via said system bus.

Claim 66 (Original): The digital copying machine as a slave machine according to claim 65, said slave machine outputting images printed by printer operation and images printed by copy operation based on the link copy function to different paper output sections.

Claim 67 (Original): The digital copying machine as a slave machine according to claim 65, said slave machine directly connected to said master machine.

Claim 68 (Original): The digital copying machine as a slave machine according to claim 65, said slave machine connected to said master machine through a network.

Claim 69 (Currently Amended): An image formation system formed with at least two units of digital copying machines connected to each other, each of which has a link copy function that a digital copying machine determined as a master machine scans an image of a document as an object to be copied and transfers the image of the scanned document to at least another one of the digital copying machines as a slave machine, and that said master

machine and said slave machine share the job of printing the scanned document image, wherein

said master machine has a printer function of printing according to a print request from the outside, and when receiving the print request from said outside during the copy operation based on the link copy function from its start to finish, the master machine puts the print request on hold, on the other hand,

said slave machine has a printer function of printing according to a print request from the outside, and when receiving the print request from said outside during the copy operation based on the link copy function from its start to finish, the slave machine interrupts the copy operation and executes the printer operation according to the print request,

wherein each of the digital copying machines comprises a memory unit connected to a system controller via a system bus and configured to store a data of the image locally in the digital copying machine, said unit comprising:

a compression unit, configured to compress said data;

a storage unit, configured to store said compressed data received from said compression unit via a local bus in said memory unit and not via said system bus.

Claim 70 (Original): The image formation system according to claim 69, wherein each of said digital copying machines outputs images printed by printer operation and images printed by copy operation based on the link copy function to different paper output sections.

Claim 71 (Original): The image formation system according to claim 69, wherein at least two units of said digital copying machines are directly connected to each other.

Claim 72 (Original): The image formation system according to claim 69, wherein at least two units of said digital copying machines are connected to each other through a network.

Claim 73 (Currently Amended): A digital copying machine as a slave machine connected to a digital copying machine as a master machine and which has a link copy function that the slave machine receives an image of a document scanned and transferred by said master machine and shares the job of printing the scanned document image with said master machine, said slave machine having:

a printer function of printing according to a print request from the outside, wherein, when receiving the print request from said outside during the copy operation based on the link copy function from its start to finish, the slave machine interrupts the copy operation and executes the printer operation according to the print request,

wherein each of the digital copying machines comprises a memory unit connected to a system controller via a system bus and configured to store a data of the image locally in the digital copying machine, said unit comprising:

a compression unit, configured to compress said data;

a storage unit, configured to store said compressed data received from said compression unit via a local bus in said memory unit and not via said system bus.

Claim 74 (Original): The digital copying machine as a slave machine according to claim 73, said slave machine outputting images printed by printer operation and images printed by copy operation based on the link copy function to different paper output sections.

Claim 75 (Original): The digital copying machine as a slave machine according to claim 73, said slave machine directly connected to said master machine.

Claim 76 (Original): The digital copying machine as a slave machine according to claim 73, said slave machine connected to said master machine through a network.

Claim 77 (New): The image formation system according to claim 1, wherein said memory unit further comprises:

at least two storage units;

at least two local buses; and

at least two compression units; said compression units are able to perform a compression and a decompression of said data, said storage units being directly connected to said compression units corresponding thereto with said local buses, allowing an external device to perform a parallel data storage and data retrieval from said memory unit.

Claim 78 (New): The image formation system according to claim 1, wherein said memory unit further comprises an image synthesis section, wherein said data and a data already stored in said storage unit can be synthesized.

Claim 79 (New): A digital copying machine according to claim 32, wherein said memory unit further comprises:

at least two storage units;

at least two local buses; and

at least two compression units; said compression units are able to perform a compression and a decompression of said data, said storage units being directly connected to

said compression units corresponding thereto with said local buses, allowing an external device to perform a parallel data storage and data retrieval from said memory unit.

Claim 80 (New): A digital copying machine according to claim 32, wherein said memory unit further comprises an image synthesis section, wherein said data and a data already stored in said storage unit can be synthesized.

Claim 81 (New): A digital copying machine according to claim 45, wherein said memory unit further comprises:

at least two storage units;

at least two local buses; and

at least two compression units; said compression units are able to perform a compression and a decompression of said data, said storage units being directly connected to said compression units corresponding thereto with said local buses, allowing an external device to perform a parallel data storage and data retrieval from said memory unit.

Claim 82 (New): A digital copying machine according to claim 45, wherein said memory unit further comprises an image synthesis section, wherein said data and a data already stored in said storage unit can be synthesized.